IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A microelectrode comprising:

an electrically conducting diamond layer;

a non-conducting diamond layer formed from electrically non-conducting diamond; ~~and containing~~

one or more pins or projections of electrically conducting diamond extending at least partially through the ~~layer of~~ non-conducting diamond layer, the pins presenting areas of electrically conducting diamond; and

a contact surface or surfaces on a back side of the electrically conducting diamond layer for connection ~~which can be connected~~ to an external circuit.

Claim 2 (Currently Amended): A microelectrode according to claim 1, wherein the pins or projections extend to a surface of the ~~layer of electrically~~ non-conducting diamond layer, presenting areas of electrically conducting diamond co-planar with that surface.

Claim 3 (Currently Amended): A microelectrode according to claim 1, wherein [[the]] areas of the electrically conducting ~~material~~ diamond layer are recessed relative with a surface of the non-conducting diamond layer, creating a well or reservoir in that surface.

Claim 4 (Currently Amended): A microelectrode according to any one of claims 1 to 3, wherein the pins or projections of electrically conducting diamond ~~present~~ comprise circular areas of the electrically conducting diamond.

Claim 5 (Original): A microelectrode according to claim 3, wherein the well or reservoir contains an additive which presents a surface co-planar with the surface in which the well or reservoir is created.

Claim 6 (Original): A microelectrode according to claim 5, wherein the additive modifies the sensitivity or selectivity of the electrode behaviour.

Claim 7 (Original): A microelectrode according to claim 5 or claim 6, wherein the additive is an electrochemical (bio-)chemical.

Claim 8 (Currently Amended): A microelectrode according to claim 1, wherein [[the]] areas of the electrically conducting diamond layer are in electrical connection ~~with one or other~~ a surface[[s]] of the electrically conducting diamond layer ~~through which they can be connected to an external circuit~~.

Claim 9 (Currently Amended): A microelectrode according to claim 1, wherein [[the]] areas of the electrically conducting diamond layer are internally electrically connected within the diamond layer into one or more groups of electrodes.

Claim 10 (Currently Amended): A microelectrode according to claim 1, wherein [[the]] areas of the electrically conducting diamond layer are externally electrically connected into one or more groups of electrodes.

Claim 11 (Original): A microelectrode according to claim 1, wherein the diamond is synthetic single crystal or polycrystalline diamond.

Claim 12 (Original): A microelectrode according to claim 1, wherein the diamond is CVD synthetic single crystal or polycrystalline diamond.

Claim 13 (Currently Amended): A microelectrode according to claim 2, wherein [[the]] areas of the electrically conducting diamond layer are [[and]] co-planar surface [[are]] and smooth.

Claim 14 (Currently Amended): A microelectrode according to claim 2, wherein [[the]] areas of the electrically conducting diamond layer are [[and]] co-planar surface and have a surface roughness of less than 100 nmRa.

Claim 15 (Original): A microelectrode according to claim 1, wherein the electrically conducting diamond is boron doped diamond.